

CLAIMS

1. A communication system having a plurality of communication apparatuses, characterized in that each of the plurality of communication apparatuses comprising:

5       first communication mean for executing a communication between each communication apparatus and other communication apparatus by a first communication protocol;

          exchange means for exchanging communication information necessary to a communication executed by a second  
10       communication protocol included in the communication protocols available by the other communication apparatus between the communication apparatus and the other communication apparatus by the communication executed by the first communication protocol;

15       switching means for switching the communication between each communication apparatus and the other communication apparatus from the communication executed by the first communication protocol to the communication executed by the second communication protocol; and

20       second communication mean for executing the communication by the second communication protocol between each communication apparatus and the other communication mean based on the communication information exchanged by the exchange means.

25       2. A communication apparatus for executing a

communication between the communication apparatus and other communication apparatus, characterized by comprising:

first communication mean for executing a communication between the communication apparatus and the other

5 communication apparatus by a first communication protocol;

acquisition means for acquiring the information of a communication protocol available by the other communication apparatus through the communication executed by the first communication protocol;

10 exchange means for exchanging communication information necessary to a communication executed using a second communication protocol included in the communication protocol available by the other communication apparatus between each communication apparatus and the other  
15 communication apparatus by the communication executed using the first communication protocol;

switching means for switching the communication between the communication apparatus and the other communication apparatus from the communication executed by the first  
20 communication protocol to the communication executed using the second communication protocol; and

second communication mean for executing the communication by the second communication protocol between the communication apparatus and the other communication  
25 apparatus based on the communication information exchanged

by the exchange means.

3. A communication apparatus according to claim 2,  
characterized in that the communication executed by the  
first and second communication protocols is a wireless  
5 communication, and, when the other communication apparatus  
is located in the vicinity of the communication apparatus,  
the first communication mean executes the communication by  
the first communication protocol between the communication  
apparatus and the other communication apparatus.

10 4. A communication apparatus according to claim 3,  
characterized in that, in the first communication protocol,  
the communication is executed by specifying the other  
communication apparatus located in the vicinity of the  
communication apparatus.

15 5. A method of executing a communication between a  
communication apparatus and other communication apparatus,  
characterized by comprising:

a first communication step of executing a communication  
between the communication apparatus and the other

20 communication apparatus by a first communication protocol;

an acquisition step of acquiring the information of a  
communication protocol available by the other communication  
apparatus by the communication executed by the first  
communication protocol;

25 an exchange step of exchanging communication

information necessary to a communication executed by a second communication protocol included in the communication protocols available by the other communication apparatus between the communication apparatus and the other

5 communication apparatus by the communication executed by the first communication protocol;

a switching step of switching the communication between the communication apparatus and the other communication apparatus from the communication executed by the first

10 communication protocol to the communication executed by the second communication protocol; and

a second communication step of executing the communication by the second communication protocol between the communication apparatus and the other communication apparatus based on the communication information exchanged at the exchange step.

6. A program for causing a computer to execute communication processing for executing a communication between a communication apparatus and other communication apparatus, comprising:

a first communication step of executing a communication between the communication apparatus and the other communication apparatus by a first communication protocol;

an acquisition step of acquiring the information of a communication protocol available by the other communication

apparatus by the communication executed by the first communication protocol;

an exchange step of exchanging communication information necessary to a communication executed by a second communication protocol included in the communication protocols available by the other communication apparatus between the communication apparatus and the other communication apparatus by the communication executed by the first communication protocol;

a switching step of switching the communication between the communication apparatus and the other communication apparatus from the communication executed by the first communication protocol to the communication executed by the second communication protocol; and

a second communication step of executing the communication by the second communication protocol between the communication apparatus and the other communication apparatus based on the communication information exchanged at the exchange step.